IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	10/761,101	Confirmation No.: 4294
US Patent No.	:	6,274,684	
Applicant	:	Loveday *et al.*	
Filed	:	January 20, 2004	
TC/A.U.	:	1796	
Examiner	:	William K. Cheung	
Docket No.	:	1999U026.RE.US	
Customer No.	:	25959	
Date	:	June 8, 2009	

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

In response to the Final Office Action of April 6, 2009 (the "Action") Applicants respectfully submit this Pre-Appeal Brief Request for Review under 37 C.F.R. §41.61. Please consider the remarks in the following Pre-Appeal Brief in the reconsideration of the above referenced application.

The instant Claims stand rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-38 of U.S. Patent No. 6,271,325 to McConville (hereinafter "McConville") in view of U.S. Patent No. 4,530,914 to Ewen et al. (hereinafter "Ewen".) Upon indication of allowable subject matter, a Terminal Disclaimer will be filed as appropriate.

The instant claims stand rejected under 35 U.S.C. §103(a) as being unpatentable over McConville in view of Ewen.

Applicants recite, *inter-alia*, "a process for polymerizing olefin(s) comprising, combining said olefin(s), a catalyst composition having a first catalyst component comprising a Group 15 containing tridentate ligated Group 3 to 7 metal compound wherein the Group 3 to 7 metal atom is bound to at least one leaving group and to three Group 15 atoms, and wherein two of the Group 15 atoms are each bound to the third Group 15 atom through a bridging group (the "Group 15 Catalyst"); and a second catalyst component which is a metallocene compound;...wherein the polymerization process is a continuous gas or slurry phase process..."

As discussed in the Response dated 23-Feb-09 Applicants recognize that McConville discloses a catalyst having the same general formula as the Group 15 Catalyst recited in the presently claimed invention. However, Applicants maintain and as the Action concedes that McConville fails to disclose or suggest combining the recited Group 15 Catalyst with a metallocene catalyst compound (See Page 3 of the Action.) McConville also fails to disclose or suggest a continuous process. The Action maintains that Ewen teaches a polymerization process involving using at least two or more metallocene catalysts. According to Page 6 of the Action:

> "[m]otivated by the expectation of success of developing a polymerization process that can be used to produce a broad and multimodal molecular with distribution (Col. 1, line 5-10), it would have been obvious to one of ordinary skill in the art to incorporate the second metallocene catalyst teaching of Ewen et al. into the invention of claims 1-38 of U.S. Patent No. 6,271,325 to obtain the invention as claimed."

Ewen is generally directed to polyolefins having a broad molecular weight distribution obtained by polymerizing ethylene or higher alpha olefins in the presence of a catalyst system comprising two or more metallocenes each having different propagation and termination rate constants and alumoxane. Ewen fails to disclose or suggest Applicants' recited Group 15 catalyst compound or, in fact, any process which combines <u>any non-metallocene catalyst</u> with a metallocene catalyst. In addition, Ewen fails to disclose or suggest Applicants' recited continuous process. Ewen fails to cure the defects in McConville, since the cited prior art fails to disclose or suggest all the limitations recited by the currently claimed invention. Thus,

McConville alone and/or in combination with Ewen cannot be found to render the instant claims obvious.

A finding of obviousness requires "a suggestion or teaching that the claimed novel form of the prior art compound could or should be prepared." In re *Cofer* (CCPA 1966) 354 F.2d 664, 148 USPQ 268, cited with approval in the unpublished decision of the CAFC in *Bristol-Myers* Co. v, U.S. *ITC* (CAFC 1989) [I5 PQ2d 12581, and a "reasonable expectation of success." *Frifsch* v. *Lin* (BPAI 1991) 21 PQ2d 1739. Nothing in Ewen suggests utilizing replacing one of the two metallocenes with another type of catalyst in the same reactor.

In a more recent decision by the Supreme Court, the Court has warned against a rigid adherence the above described "teaching, suggestion, motivation" (TSM) test. According to the Court, "when there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely *the* product not of innovation, but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under §103" *XSR International Co. v. Teleflex Inc. et al., No. 04-1350,* slip op. (U.S. Apr. 30,2007).

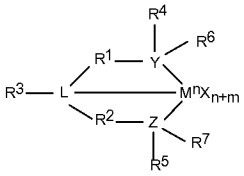
However, replacing one of two metallocene catalysts with a totally different chemistry to achieve an as yet unknown result cannot be considered a results effective variable found within the "common sense" of one skilled in the art of metallocene catalysts, especially when one considers the unpredictable nature of catalysis.

It has long been established that catalysis is generally considered unpredictable merely from the chemical, nature of the catalyst. *Corona* Co. *v. Dovan* (USSC 1928) 276 US 358, 369. Catalytic effects are not ordinarily predictable with certainly. In *re Doumcai* et *al.* (CCPA 1960) 281 F.2d *215,* 126 USPQ 408.

It is also well established that the known similarity between two materials may suggest the probability of the suitability of one material for a particular purpose when the other is known to be useful for that purpose. In re *West (CCPA 1947)* 160 F.2d *570,* 73 USPQ 227. The effect of a modification of one prior art catalytic process in a manner employed in another prior art process which employs a different catalyst was

held unpredictable. See *Exparte Berger* et al. (POBA 1952) 108 USPQ 236. Absent Applicants' disclosure, it was not known what type of interactions may occur as a result of the two catalysts and/or what the outcome may have been. Thus, no motivation to do so is present in the cited prior art. Accordingly, McConville in view of Ewen fails to render the presently claimed invention obvious.

The claims have further been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,294,495 to Matsunaga (hereinafter "Matsunaga") in view of Ewen. Similar to McConville, Matsunaga is generally directed to an activated transition metal catalyst in a reduced oxidation state for olefin polymerization. Matsunaga fails to disclose or suggest Applicants' recited process comprising a Group 15 containing catalyst compound; much less such a catalyst in combination with a metallocene catalyst. Matsunaga further fails to disclose or suggest Applicants' recited continuous process. Matsunaga thus fails to disclose or suggest all of Applicants' recited limitations. The rejection involving Matsunaga is essentially the same as with McConville. Matsunaga fails to disclose or suggest combination of the catalyst disclosed therein with a metallocene. Furthermore, Applicants have amended the claims to further clarify the presently claimed invention with respect to the Matsunaga disclosure. In particular, Matsunaga fails to disclose a structure wherein Applicants' recited R^1 and R^2 are independently a linear, branched, or cyclic C_2 to C_{20} alkylene group according to the following formula:



Instead, Matsunaga discloses structures wherein R^1 and R^2 are alkenyl (or aromatic) moieties, which brings into doubt whether or nor Matsunaga actually discloses a tridentate ligand (see Response dated 24-Jun-08, Pgs. 15-18.) For the reasons discussed above, Ewen fails to cure the defects in Matsunaga. In any event, in the absence of any motivation to combine a metallocene with Applicants' recited catalyst compound, Matsunaga in view of Ewen cannot be found to render the instant claims obvious.

Applicants thus conclude that the Action has used an improper standard in arriving at the rejection of the above claims under section 103, based on improper

hind sight which fails to consider the totality of Applicants' presently claimed invention and to the totality of the cited references. More specifically, the Action has used Applicants' disclosure to select portions of the cited references to allegedly arrive at Applicants' invention. In doing so, the Action has failed to consider the teachings of the references or Applicants' invention as a whole in contravention of section 103. When, as here, the Section 103 rejection was based on selective combination of the prior art references to allegedly render a subsequent invention obvious, there must be some reason for the combination other than the hind sight gleaned from the invention itself. Stated in another way, "[i]t is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious." *In re Fritch* 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992).

The cited prior art fails to provide any motivation to disregard the teachings of Ewen and replace one of the two metallocene catalysts with a totally different type of catalyst. As such, the cited prior art fails to render the presently claimed invention obvious. Applicants respectfully request that all rejections be withdrawn and solicit a prompt notice of allowability. In the alternative, Applicants invite the Office to telephone the undersigned attorney if there are any other issues outstanding which have not been presented to the Office's satisfaction.

June 8, 2009
Date

/Leandro Arechederra,III/
Leandro Arechederra, III
Registration No. 52,457

Univation Technologies, LLC
5555 San Felipe, Suite 1950
Houston, Texas 77056-2723
(713) 892-3729 Voice
(713) 892-3687 Facsimile